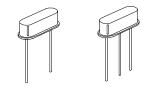


Pletronics, Inc.

19013 36th Ave. W, Suite H • Lynnwood, WA 98036 USA Manufacturer of High Quality Frequency Control Products

LP Crystal Series

- HC-49/US Low Profile Metal Thru-Hole Crystals
- Available in 3 heights, LP49: 3.5mm, LP24: 2.5mm, LP21: 2.1mm and with 3rd Case Pin: 3LP49



3.000 MHz - 70.000 MHz

Standard Specifications

Calibration Frequency Tolerance at 25 °C Operating Temperature Range (OTR) Frequency Stability (FS) over OTR Drive Level

Aging at 25°C **Shunt Capacitance**

Pullability

± 30 PPM is standard, tighter tolerances available

0 to +70°C is standard, but can be extended to -40 to +85°C

± 50 PPM is standard, tighter tolerances available

 $50 \mu W$ is standard, customer may specify

± 5 PPM per year is standard, customer may specify ± 1 PPM

7 pF maximum

May be specified by customer in terms of frequency shift required over a certain range of load capacitance (e.g. +100 PPM from CL=12 to CL=18 pF) or as motional capacitance (fF)

Part Numbering Guide **ESR Values** Portions of the part number that appear after the frequency may not Oscillation Frequency Range Maximum be marked on part (C of C provided) Mode (MHz) ESR (Ohms) LP49 B E - xx - 70.0M - IN XXX (Internal Code or blank) **Fundamental** 3.000 - 3.999200 AT Cut 150 4.000 - 4.999**Options** Model (Height) 5.000 - 5.999IN = Insulator 120 LP49: 3.56mm 100 TR = Paper Tape & Reel 6.000 - 6.999LP24: 2.5mm PN = Put on Pads 7.000 - 7.99980 LP21: 2.1mm 8.000 - 12.99950 Frequency in MHz 3LP49: case pin, 13.000 - 30.00040 **Load Capacitance** 3.56mm Parallel Resonance in pF (3 10 pF) 3rd Overtone 25.000 - 70.000 100 SR = Series Resonance AT Cut Cal Tol / Freq Stability **Temperature Range** Blank = 30/50B = 30/30Blank: 0 to +70°C Consult factory for lower ESR C = 15/30E: - 40 to +85°C D = 10/20 (consult factory) H: - 20 to +70°C

Consult factory for available frequencies and specs. Not all options available for all frequencies. A special part number may be assigned

Mechanical: inches (mm)

not to scale

3LP49

Due to part size and factory abilities, part marking may vary from lot to lot and may contain our part number or an internal code.

